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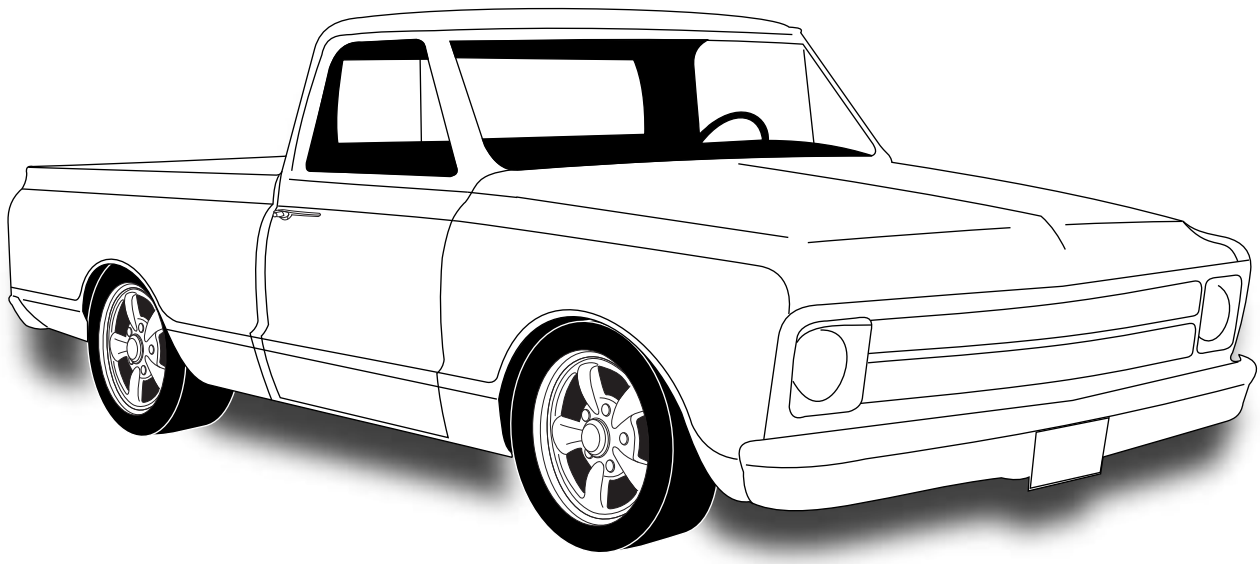
1967-72 CHEV PICK-UP

WITHOUT FACTORY AIR
w/ FACTORY CONTROLS
751171



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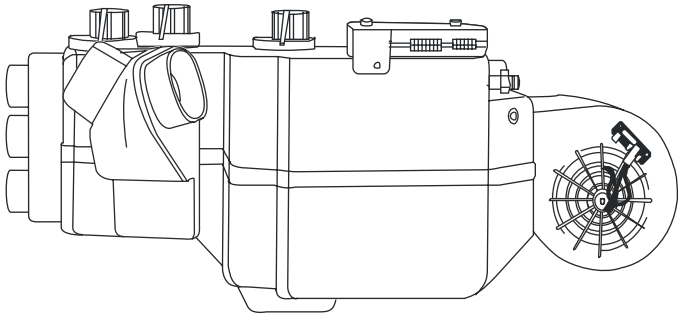
EVAPORATOR KIT PACKING LIST

EVAPORATOR KIT
751171

NO.	QTY.	PART NO.	DESCRIPTION
1.	1	744005	GEN IV 3 VENT EVAP. SUB CASE w/204 ECU
2.	1	791171	ACCESSORY KIT 67-72 CHEV P-UP wo AC w/ FACTORY AIR CONTROLS

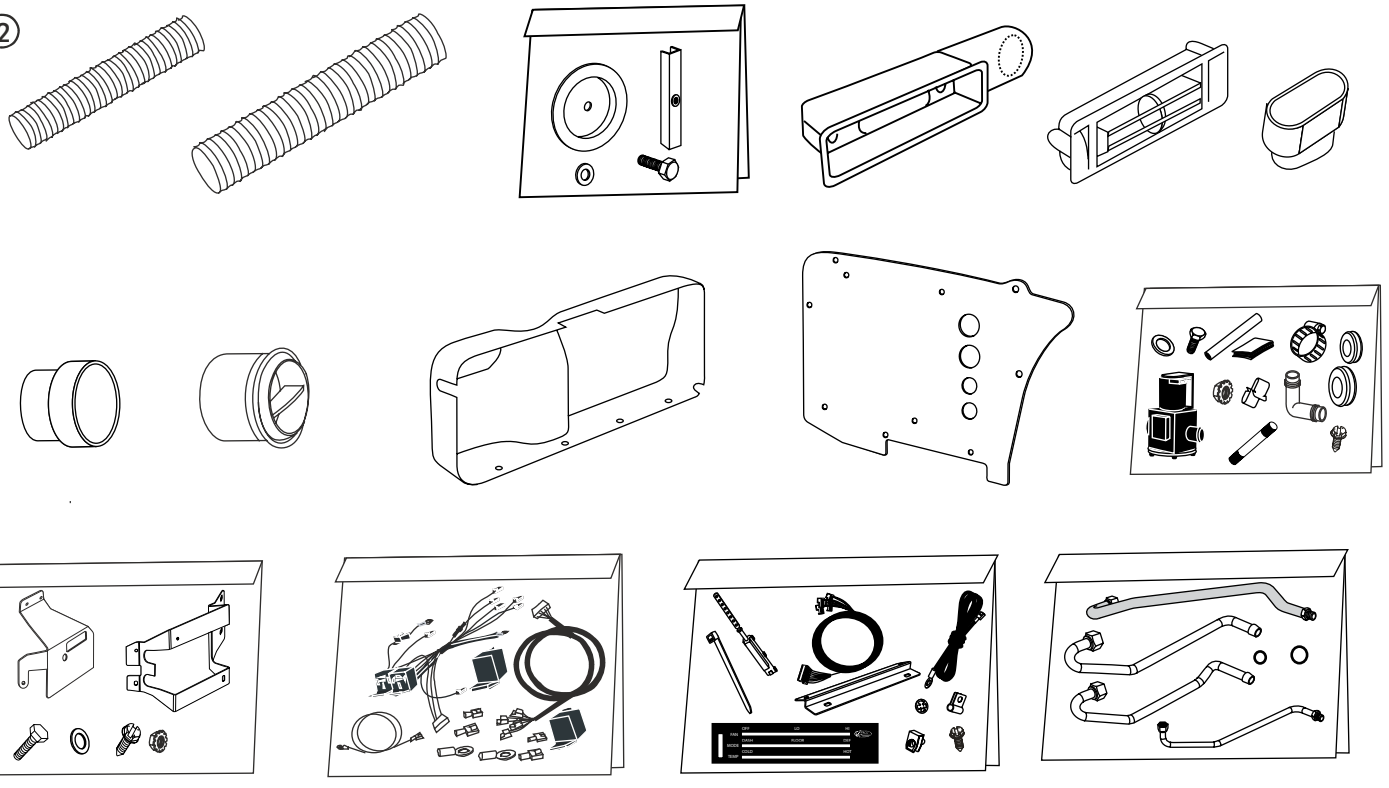
**** BEFORE BEGINNING INSTALLATION OPEN ALL PACKAGES AND CHECK CONTENTS OF SHIPMENT. PLEASE REPORT ANY SHORTAGES DIRECTLY TO VINTAGE AIR WITHIN 15 DAYS. AFTER 15 DAYS, VINTAGE AIR WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED ITEMS.**

①



GEN IV 3 VENT EVAP SUB CASE w/204 ECU 744005

②



ACCESSORY KIT 791171

NOTE: IMAGES MAY NOT DEPICT ACTUAL PARTS AND QUANTITIES. REFER TO PACKING LIST FOR ACTUAL PARTS AND QUANTITIES.

IMPORTANT NOTICE–PLEASE READ

FOR MAXIMUM SYSTEM PERFORMANCE VINTAGE AIR RECOMMENDS THE FOLLOWING:

THIS KIT DOES NOT CONTAIN HEATER HOSE. YOU MUST PURCHASE 12 FEET OF 5/8" DIA. HEATER HOSE FROM VINTAGE AIR (31800-VUD) OR FROM YOUR LOCAL PARTS RETAILER

SAFETY SWITCHES:

YOUR VINTAGE AIR SYSTEM IS EQUIPPED WITH A BINARY PRESSURE SAFETY SWITCH. A BINARY SWITCH (11078-VUS) DISENGAGES THE COMPRESSOR CLUTCH IN CASE OF EXTREME LOW PRESSURE CONDITION (REFRIGERANT LOSS) OR EXCESSIVELY HIGH HEAD PRESSURE (406 PSI), TO PREVENT COMPRESSOR DAMAGE OR HOSE RUPTURE. A TRINARY SWITCH (11076-VUS) COMBINES HI/LO PRESSURE PROTECTION WITH AN ELECTRIC FAN OPERATION SIGNAL AT 254 PSI., AND MAY BE SUBSTITUTED FOR USE WITH ELECTRIC CONDENSER FANS. COMPRESSOR SAFETY SWITCHES ARE EXTREMELY IMPORTANT SINCE AN A/C SYSTEM RELIES ON REFRIGERANT TO CARRY LUBRICATION THROUGH THE SYSTEM.

SERVICE INFO:

ATTENTION: SYSTEM COMPONENTS: THE COMPRESSOR, EVAPORATOR, CONDENSER & DRIER ARE CAPPED. CAPS MAY BE UNDER PRESSURE WITH DRY NITROGEN; BE CAREFUL REMOVING CAPS. DO NOT REMOVE CAPS PRIOR TO INSTALLATION. REMOVING CAPS PRIOR TO INSTALLATION WILL CAUSE COMPONENTS TO COLLECT MOISTURE AND LEAD TO PREMATURE FAILURE AND REDUCED PERFORMANCE.

EVACUATE THE SYSTEM FOR 35-45 MINUTES WITH SYSTEM COMPONENTS (DRIER, COMPRESSOR, EVAPORATOR AND CONDENSER) AT A TEMPERATURE OF AT LEAST 85° F. ON A COOL DAY THE COMPONENTS CAN BE HEATED WITH A HEAT GUN OR BY RUNNING THE ENGINE WITH THE HEATER ON BEFORE EVACUATING. LEAK CHECK AND CHARGE TO SPECIFICATIONS.

VINTAGE AIR SYSTEMS ARE DESIGNED TO OPERATE WITH R134a REFRIGERANT ONLY! USE OF ANY OTHER REFRIGERANTS RISKS A DANGER OF FIRE AND COULD DAMAGE EITHER YOUR AIR CONDITIONING SYSTEM OR YOUR VEHICLE.

USE OF ANY OTHER REFRIGERANTS WILL VOID ALL WARRANTIES OF THE AIR CONDITIONING SYSTEM AND COMPONENTS. USE OF THE PROPER TYPE AND AMOUNT OF REFRIGERANT IS CRITICAL TO PROPER SYSTEM OPERATION. VINTAGE AIR RECOMMENDS OUR SYSTEMS BE CHARGED BY WEIGHT WITH A QUALITY CHARGING STATION OR SCALE.

REFRIGERANT CAPACITY FOR VINTAGE AIR SYSTEMS

(FOR OTHER SYSTEMS, CONSULT MANUFACTURER GUIDELINES)

134a SYSTEM

CHARGE WITH 1.8 lbs.
(1lbs. 12ozs) OF REFRIGERANT

LUBRICANT CAPACITIES: NEW COMPRESSOR - NO ADDITIONAL OIL NEEDED

IMPORTANT WIRING NOTICE-PLEASE READ

SOME VEHICLES MAY HAVE HAD SOME OR ALL OF THEIR RADIO INTERFERENCE CAPACITORS REMOVED. THERE SHOULD BE A CAPACITOR FOUND AT EACH OF THE FOLLOWING LOCATIONS:

1. ON THE POSITIVE TERMINAL OF THE IGNITION COIL
2. IF THERE IS A GENERATOR, ON THE ARMATURE TERMINAL OF THE GENERATOR
3. IF THERE IS A GENERATOR, ON THE BATTERY TERMINAL OF THE VOLTAGE REGULATOR

MOST ALTERNATORS HAVE A CAPACITOR INSTALLED INTERNALLY TO ELIMINATE WHAT IS CALLED 'WHINING' AS THE ENGINE IS REVVED. IF WHINING IS HEARD IN THE RADIO, OR JUST TO BE EXTRA CAUTIOUS, A RADIO INTERFERENCE CAPACITOR CAN BE ADDED TO THE BATTERY TERMINAL OF THE ALTERNATOR.

IT IS ALSO IMPORTANT THAT THE BATTERY LEAD IS IN GOOD SHAPE AND THAT THE GROUND LEADS ARE NOT COMPROMISED. THERE SHOULD BE A HEAVY GROUND FROM THE BATTERY TO THE ENGINE BLOCK, AND ADDITIONAL GROUNDS TO THE BODY AND TO THE CHASSIS.

IF THESE PRECAUTIONS ARE NOT OBSERVED, IT IS POSSIBLE FOR VOLTAGE SPIKES TO BE PRESENT ON THE BATTERY LEADS. THESE SPIKES COME FROM IGNITION SYSTEMS, CHARGING SYSTEMS, AND FROM TURNING SOME OF THE VEHICLE'S OTHER SYSTEMS ON AND OFF. MODERN COMPUTER OPERATED EQUIPMENT CAN BE SENSITIVE TO VOLTAGE SPIKES ON THEIR POWER LEADS, WHICH CAN CAUSE UNEXPECTED RESETS, STRANGE BEHAVIOR, AND MAY ALSO CAUSE PERMANENT DAMAGE.

VINTAGE AIR STRIVES TO HARDEN THEIR PRODUCTS AGAINST THESE TYPES OF ELECTRICAL NOISE, BUT THERE IS A POINT WHERE A VEHICLE'S ELECTRICAL SYSTEM CAN BE DEGRADED SO MUCH THAT NOTHING CAN HELP.

RADIO INTERFERENCE CAPACITORS SHOULD BE AVAILABLE AT MOST AUTO & TRUCK PARTS SUPPLIERS. THEY TYPICALLY ARE CYLINDRICAL IN SHAPE, A LITTLE OVER AN INCH LONG, A LITTLE OVER A HALF INCH IN DIAMETER, THEY HAVE A SINGLE LEAD COMING FROM ONE END OF THE CYLINDER WITH A TERMINAL ON THE END OF THE WIRE, AND THEY WILL HAVE A MOUNTING CLIP WHICH IS SCREWED INTO A GOOD GROUND ON THE VEHICLE. THE SPECIFIC VALUE OF THE CAPACITANCE IS NOT TOO SIGNIFICANT, IN COMPARISON TO IGNITION CAPACITORS THAT ARE MATCHED WITH THE COIL TO REDUCE PITTING OF THE POINTS.

- CARE MUST BE TAKEN WHEN INSTALLING THE COMPRESSOR LEAD, NOT TO SHORT IT TO GROUND. THE COMPRESSOR LEAD MUST NOT BE CONNECTED TO A CONDENSER FAN OR ANY OTHER AUXILIARY DEVICE. SHORTING TO GROUND OR CONNECTING TO A CONDENSER FAN OR ANY OTHER AUXILIARY DEVICE WILL CAUSE SEVERE DAMAGE TO THE ECU.
- WHEN INSTALLING GROUND LEADS ON GEN IV SYSTEMS, THE BLOWER CONTROL GROUND AND ECU GROUND MUST BE CONNECTED DIRECTLY TO THE NEGATIVE BATTERY POST.
- THE HEATER CONTROL VALVE IS A NORMALLY OPEN VALVE. IT MUST BE CONNECTED TO THE ECU TO BLOCK WATER FLOW IN MAX AC MODE.

BEFORE STARTING THE INSTALLATION, CHECK THE FUNCTION OF THE VEHICLE (HORN, LIGHTS,ETC.) FOR PROPER OPERATIONS. STUDY THE INSTRUCTIONS, ILLUSTRATIONS, & DIAGRAMS.

ENGINE COMPARTMENT

REMOVE THE FOLLOWING

- ☐ DISCONNECT BATTERY.
- ☐ DRAIN RADIATOR, REMOVE RADIATOR (RETAIN)
- ☐ HEATER BLOWER ASSEMBLY AND OEM HEATER HOSES (DISCARD)
- ☐ **NOTE:** TO REMOVE THE OEM HEATER BLOWER ASSEMBLY (UNDER HOOD) AND THE AIR DISTRIBUTION SYSTEM (UNDER DASH). THE FACTORY MANUAL RECOMMENDS THAT YOU REMOVE RIGHT INNER FENDER FOR ACCESSIBLITY.

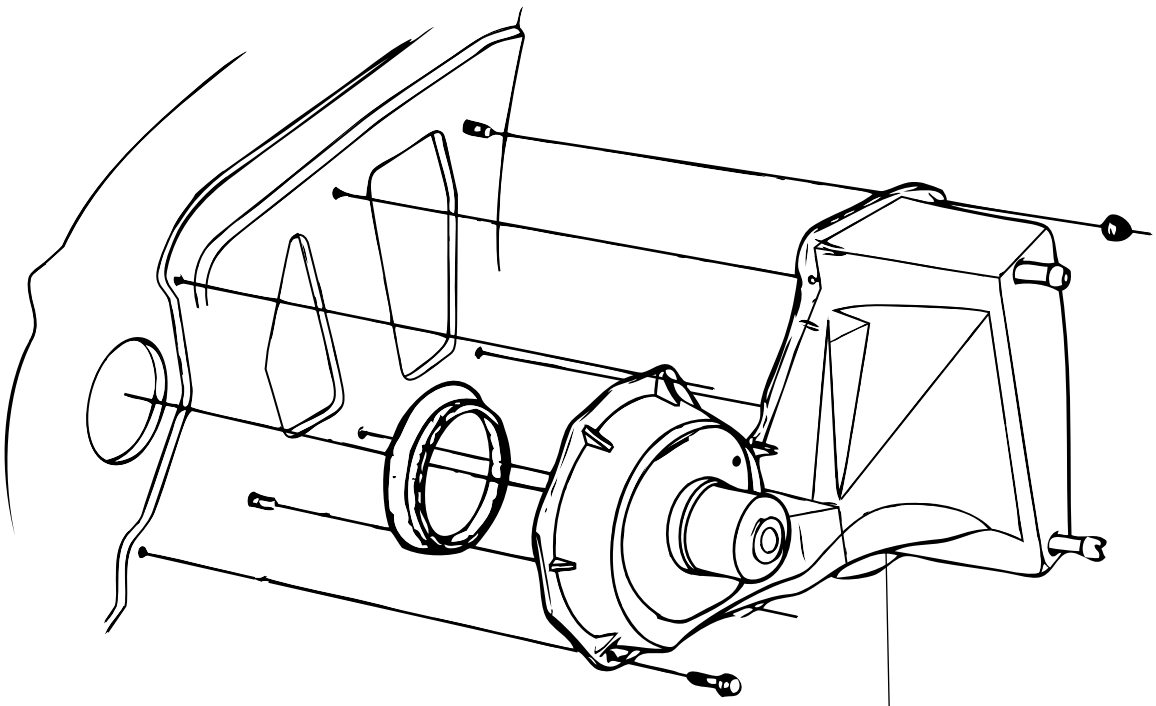


FIGURE 1

CONDENSER ASSEMBLY & INSTALLATION

- ☐ REFER TO SEPARATE INSTRUCTIONS INCLUDED WITH THE CONDENSER KIT TO INSTALL THE CONDENSER.
- ☐ BINARY SWITCH INSTALLATION (REFER TO CONDENSER INSTRUCTIONS)

COMPRESSOR & BRACKETS

- ☐ REFER TO SEPARATE INSTRUCTIONS INCLUDED WITH THE BRACKET KIT TO INSTALL THE COMPRESSOR AND BRACKET.

PASSENGER COMPARTMENT

REMOVE THE FOLLOWING:

- ☐ REMOVE GLOVE BOX DOOR (RETAIN) AND GLOVE BOX (DISCARD).
- ☐ DISCONNECT ALL WIRE AND CABLES FROM CONTROL PANEL AND RADIO.
- ☐ ALL HOSE AND DUCTING FROM DEFROST DUCTS (SEE FIGURE 2 BELOW.)
- ☐ OEM HEATER ASSEMBLY.

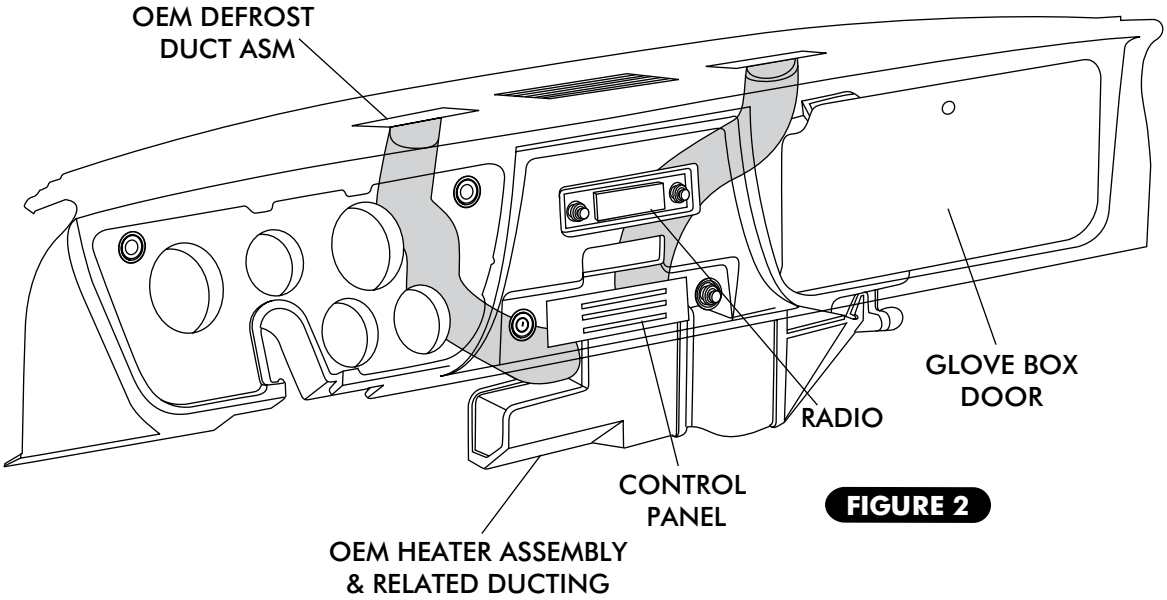


FIGURE 2

DEFROST DUCT AND LOUVER INSTALLATION

- ☐ INSTALL S-CLIPS ON DEFROST DUCT HOSE ADAPTERS AND ATTACH TO OEM DEFROSTER DUCTS AS SHOWN IN FIGURE 3 BELOW.
- ☐ INSTALL CENTER LOUVER IN DASH AS SHOWN IN FIGURE 3b BELOW. USE TEMPLATE PROVIDED ON PAGE 23.
- ☐ INSTALL DRIVER/ PASSENGER SIDE LOUVER IN DASH AS SHOWN IN FIGURE 3a BELOW. USE TEMPLATE PROVIDED ON PAGE 22.

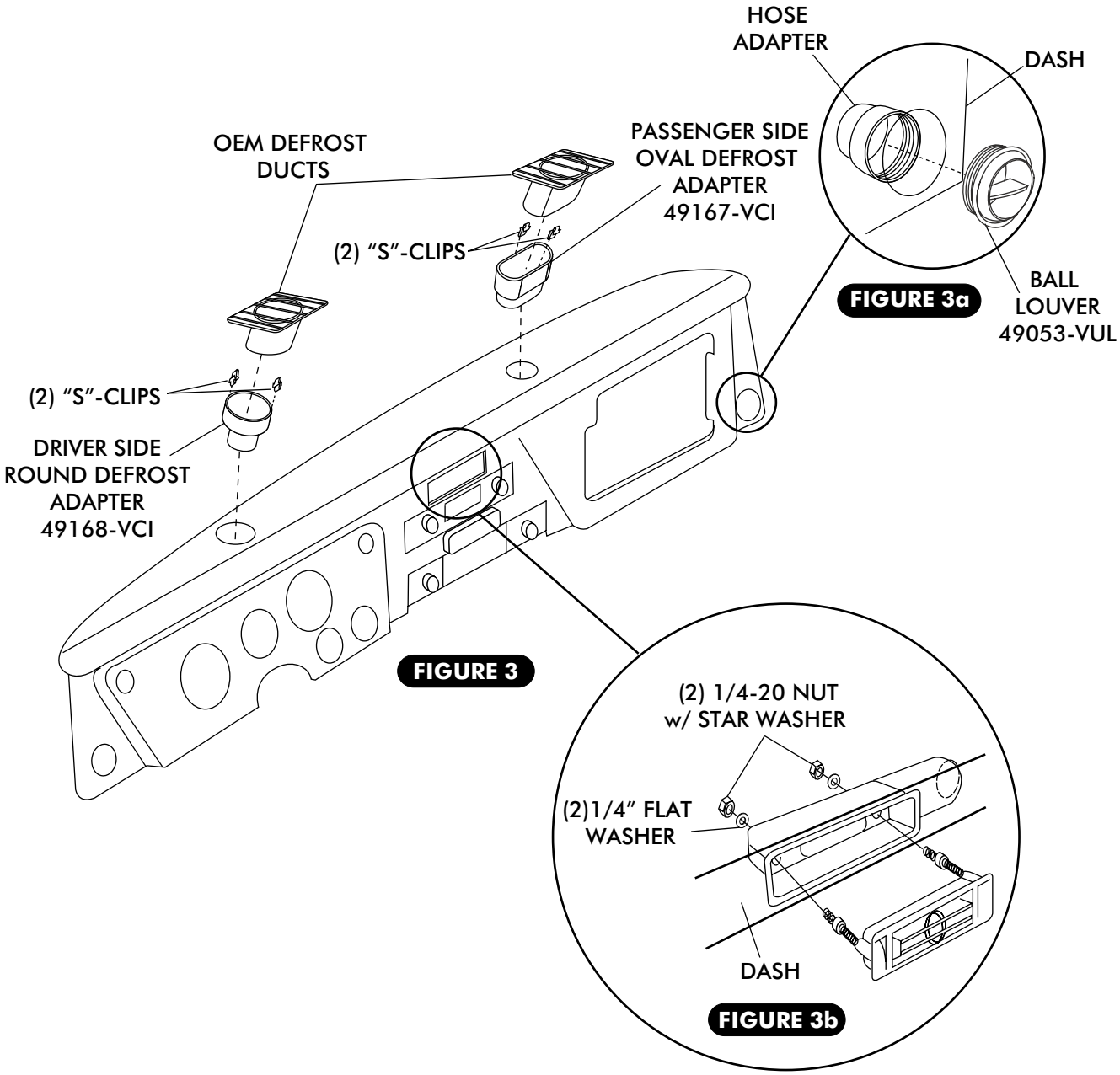


FIGURE 3a

FIGURE 3

FIGURE 3b

FRESH AIR CAP AND FIREWALL COVER INSTALLATION

- ☐ APPLY A 1/4" BEAD OF SILICONE AROUND THE BACK SIDE OF THE FRESH AIR CAP AS SHOWN IN FIGURE 4, BELOW.
- ☐ ATTACH FRESH AIR CAP TO FIREWALL USING A 1/4-20 x 1" BOLT AND WASHER, SEE FIGURE BELOW.
- ☐ APPLY A 1/4" BEAD OF SILICONE AROUND THE BACK SIDE OF THE FIREWALL COVER AS SHOWN BELOW.
- ☐ INSTALL FIREWALL COVER TO FIREWALL USING (2) 1/4-20 x 1" HEX BOLTS, (2) FLAT WASHERS AND 1/4" NUT w/ STARWASHERS IN THE OEM HOLES AS SHOWN BELOW.
- ☐ USE FIREWALL COVER AS TEMPLATE TO DRILL (6) 3/16" HOLES IN FIREWALL AND THEN SECURE USING #14 x 3/4" SHEET METAL SCREWS AS SHOWN BELOW.
- ☐ USING FIREWALL COVER AS TEMPLATE DRILL (2) 9/32" HOLES IN FIREWALL AS SHOWN BELOW.
- ☐ INSTALL GROMMETS AS SHOWN BELOW.

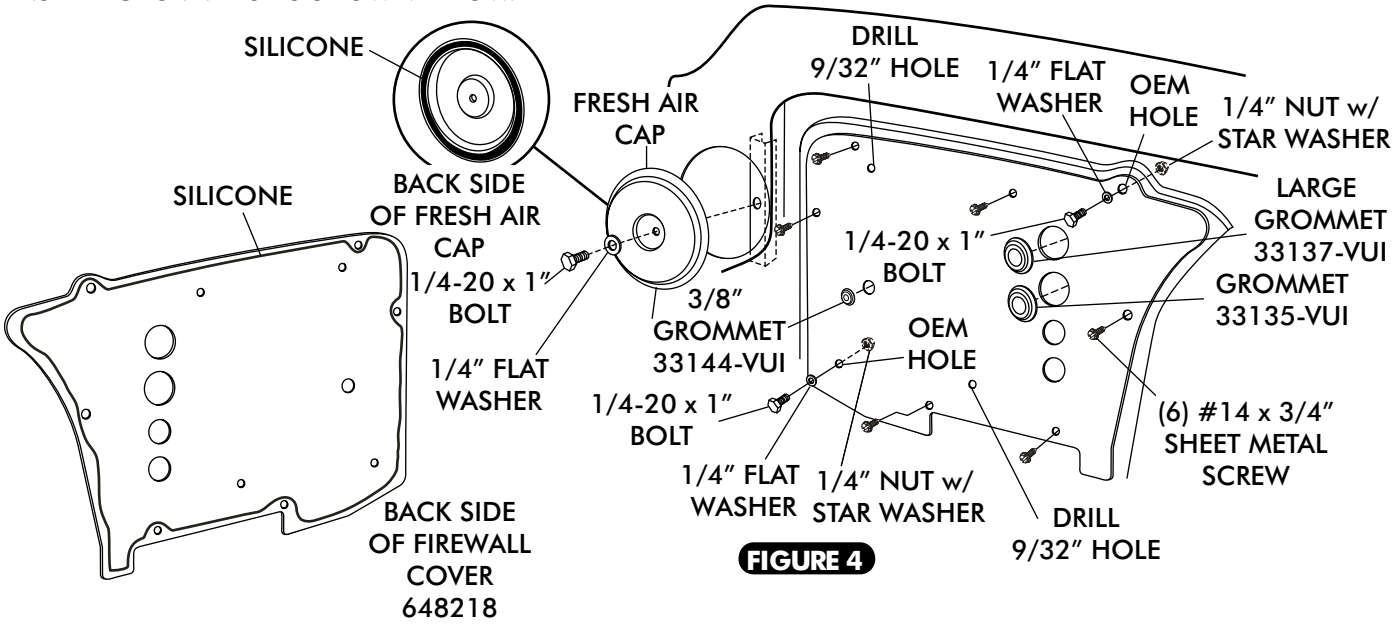


FIGURE 4

BRACKET & EVAPORATOR HARDLINE INSTALLATION

- ☐ ON A WORK BENCH INSTALL EVAPORATOR REAR BRACKET USING (4) 1/4-20 x 1/2" HEX BOLTS.
- ☐ INSTALL HARDLINES WITH PROPERLY LUBRICATED O-RINGS. (SEE FIGURE 9, PAGE 12, AND FIGURE 6, PAGE 10.)
- ☐ **NOTE: WRAP THE #10 FITTING CONNECTIONS WITH PRESS TAPE. SEE FIGURE 6, PAGE 10.**
- ☐ INSTALL EVAPORATOR FRONT BRACKET ON EVAPORATOR USING (2)1/4-20 x 1/2" HEX BOLTS AND TIGHTEN AS SHOWN IN FIGURE 5 BELOW.

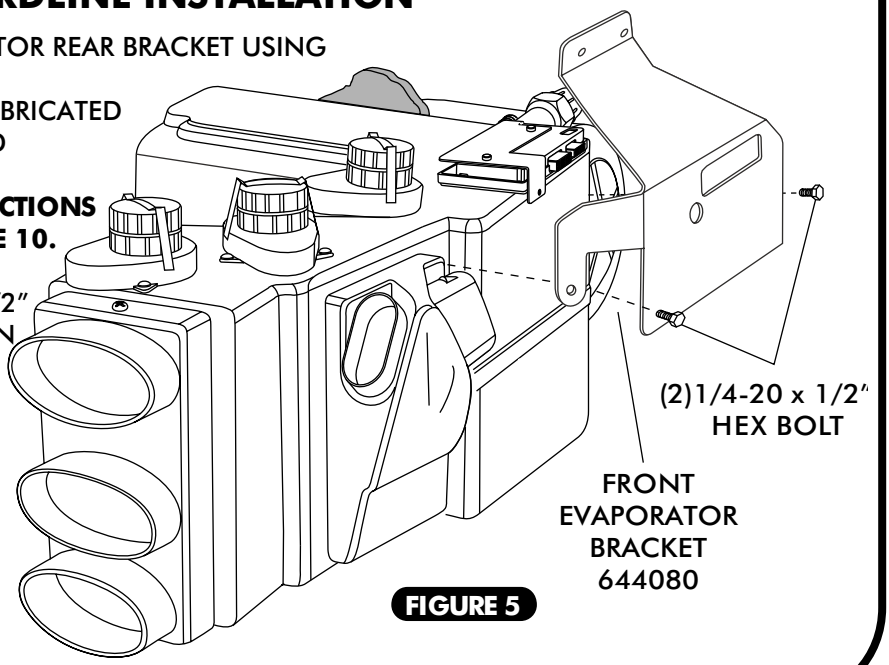


FIGURE 5

BRACKET & EVAPORATOR HARDLINE INSTALLATION CONT.

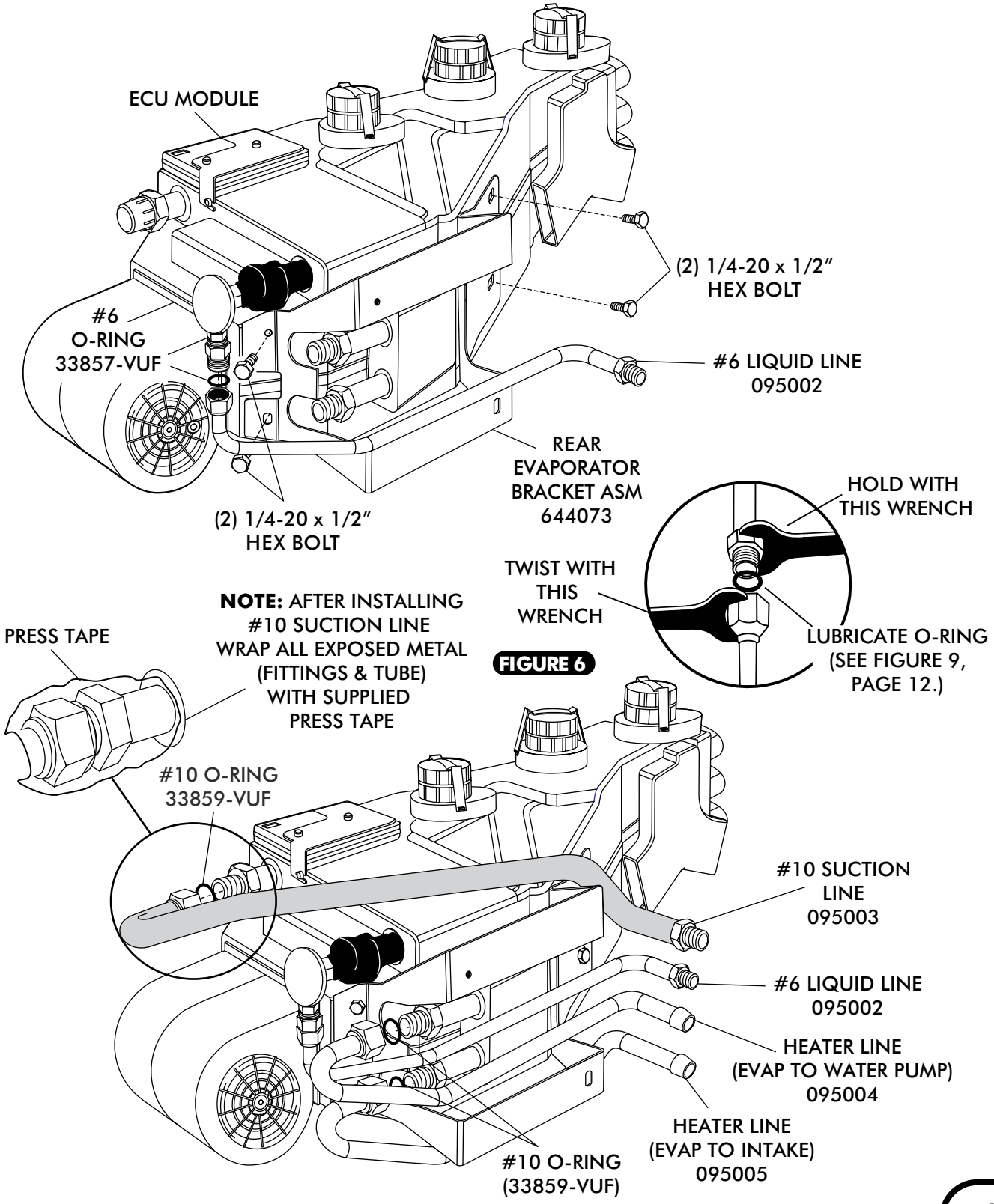


FIGURE 6

EVAPORATOR INSTALLATION

- ☐ LIFT EVAPORATOR UNIT UP UNDER THE DASHBOARD. SECURE LOOSELY TO THE FIREWALL USING (2) 1/4-20 x 1" HEX BOLTS, (2) FLAT WASHERS AND 1/4" NUT w/ STAR WASHER. SEE FIGURE 7.
- ☐ NOTE: TO ENSURE PROPER DRAINAGE, IT IS VERY IMPORTANT THAT THE EVAPORATOR IS LEVEL, BOTH LEFT-RIGHT AND FORE-AFT. CHECK FOR LEVEL ON THE FLAT PORTIONS OF THE CASE AROUND THE DRAIN, BLOCK THE UNIT UP, THEN DRILL FOR FRONT BRACKET SCREWS.
- ☐ SECURE THE FRONT EVAPORATOR MOUNTING BRACKET TO COWL USING (2) #14 x 3/4" HEX SHEET METAL SCREWS SEE FIGURE 7a BELOW.
- ☐ VERIFY THAT EVAPORATOR UNIT IS LEVEL AND SQUARE TO THE DASH, THEN TIGHTEN ALL MOUNTING BOLTS. (**NOTE: TIGHTEN THE BOLT ON FIREWALL FIRST, THEN THE FRONT MOUNTING BRACKET**.)

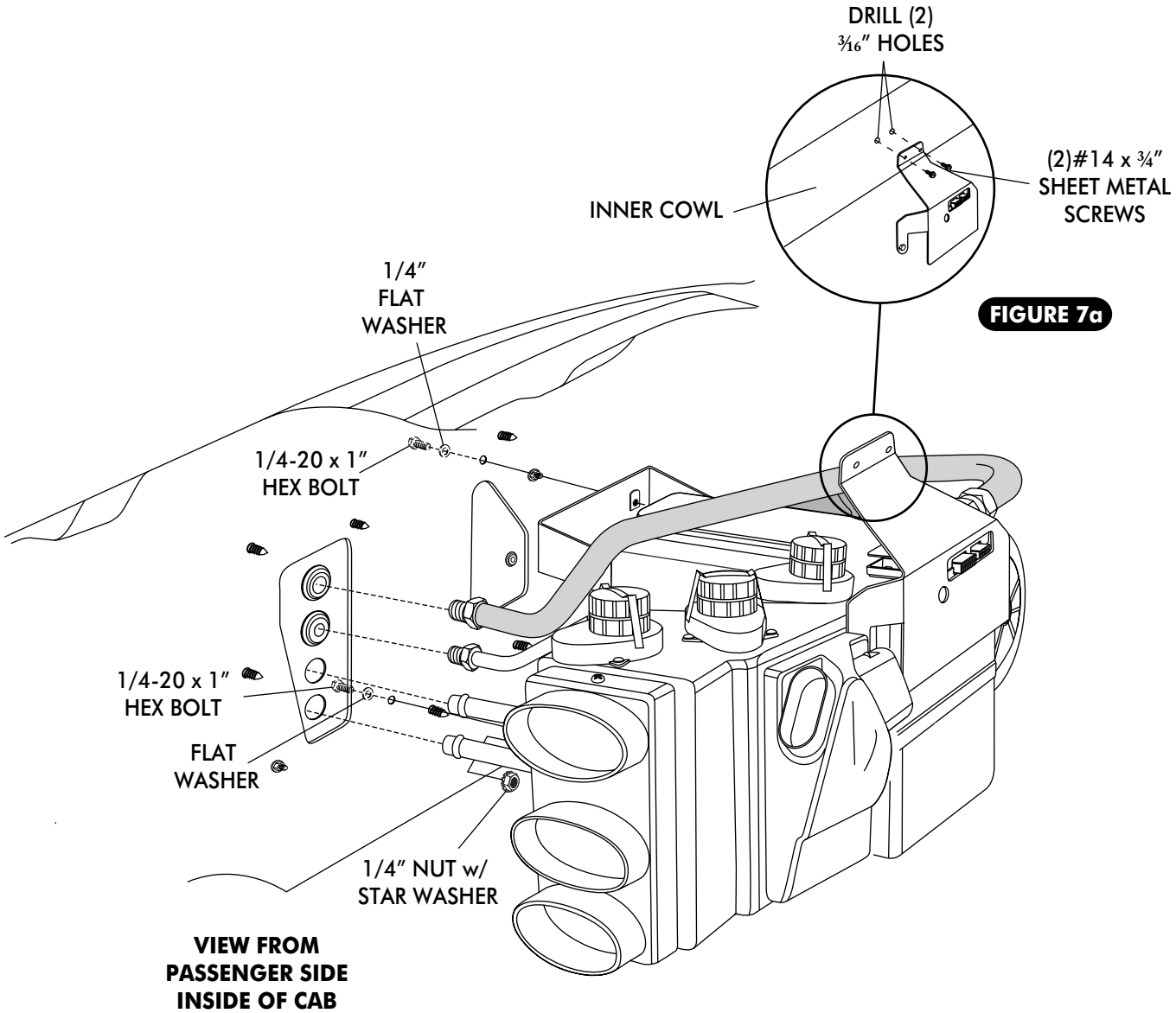
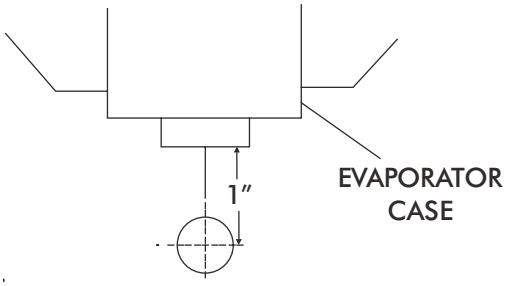


FIGURE 7a

FIGURE 7

DRAIN HOSE INSTALLATION

- ☐ LOCATE EVAPORATOR DRAIN ON BOTTOM OF EVAPORATOR CASE.
- ☐ IN-LINE WITH DRAIN, LIGHTLY MAKE A MARK ON THE FIREWALL MEASURE 1" DOWN AND DRILL A 5/8" HOLE THROUGH THE FIREWALL.
- ☐ INSTALL DRAIN HOSE TO BOTTOM OF EVAPORATOR UNIT AND ROUTE THROUGH FIREWALL. INSTALL 1/2" 90° DRAIN ELBOW ON DRAIN HOSE.



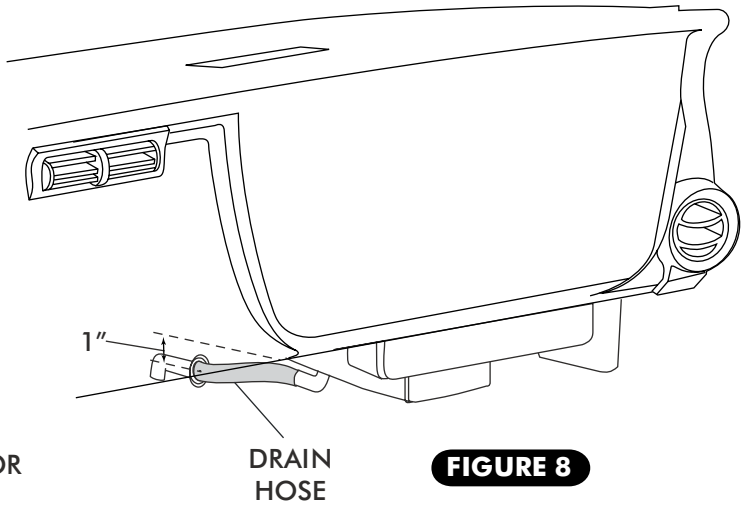


FIGURE 8

LUBRICATING O-RINGS

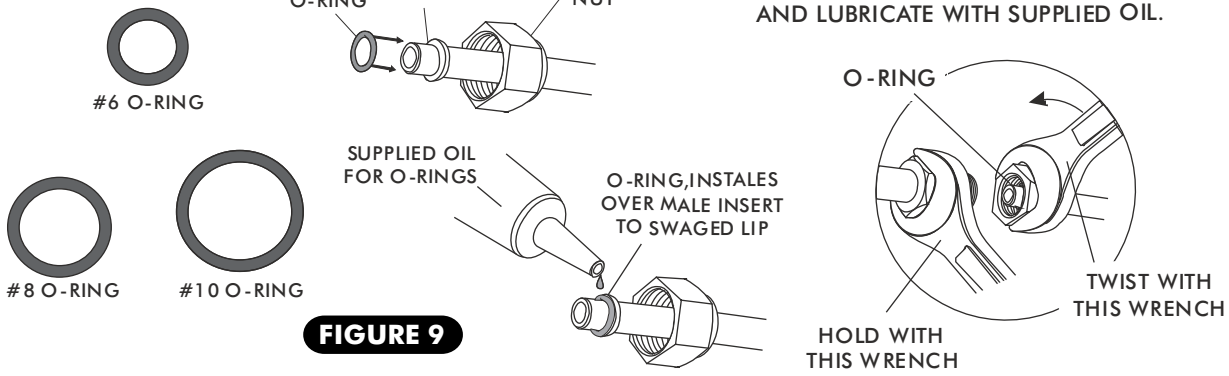


FIGURE 9

A/C HOSE INSTALLATION

STANDARD HOSE KIT

- ☐ LOCATE THE #8 COMPRESSOR A/C HOSE. LUBRICATE (2) #8 O-RINGS (SEE FIGURE 9, ABOVE) AND CONNECT THE 135° FEMALE FITTING w/134a SERVICE PORT TO THE #8 DISCHARGE PORT ON THE COMPRESSOR. ROUTE THE STRAIGHT FEMALE FITTING TO THE #8 CONDENSER HARDLINE COMING THROUGH CORE SUPPORT. SEE FIGURE 11, PAGE 14. TIGHTEN EACH FITTING CONNECTION AS SHOWN.
- ☐ LOCATE THE #10 COMPRESSOR A/C HOSE. LUBRICATE (2) #10 O-RINGS (SEE FIGURE 9, ABOVE) AND CONNECT THE #10 135° FEMALE FITTING w/134a SERVICE PORT TO THE #10 SUCTION PORT ON THE COMPRESSOR. ROUTE THE 90° FEMALE FITTING TO THE #10 EVAPORATOR. SEE FIGURE 10, PAGE 13 AND FIGURE 11, PAGE 14. TIGHTEN EACH FITTING CONNECTION AS SHOWN.
- ☐ LOCATE THE #6 EVAPORATOR A/C HOSE. LUBRICATE (2) #6 O-RINGS (SEE FIGURE 9, ABOVE) AND CONNECT THE STRAIGHT FEMALE FITTING TO THE #6 CONDENSER HARDLINE COMING THROUGH CORE SUPPORT. ROUTE THE 90° FEMALE FITTING TO THE #6 EVAPORATOR. SEE FIGURE 10, PAGE 13 AND FIGURE 11, PAGE 14. TIGHTEN EACH FITTING CONNECTION AS SHOWN.

MODIFIED A/C HOSE KIT

- ☐ REFER TO SEPARATE INSTRUCTIONS INCLUDED WITH MODIFIED HOSE KIT.

HEATER HOSE & HEATER CONTROL VALVE INSTALLATION

☐ ROUTE HEATER HOSE FROM WATER PUMP TO THE HEATER LINE COMING THROUGH THE FIREWALL AS SHOWN IN FIGURE 10, BELOW. SECURE USING HOSE CLAMPS. NOTE: A SMALL AMOUNT OF SILICONE SPRAY WILL EASE HEATER HOSE INSTALLATION.

☐ ROUTE HEATER HOSE FROM THE INTAKE TO THE HEATER LINE COMING THROUGH THE FIREWALL AS SHOWN BELOW. NOTE: INSTALL HEATER CONTROL VALVE IN-LINE WITH INTAKE MANIFOLD (PRESSURE SIDE) HEATER HOSE, SECURE USING HOSE CLAMPS AS SHOWN. **NOTE PROPER FLOW DIRECTION.**

☐ HOSE SHOULD PROTRUDE THROUGH THE FIREWALL COVER SLIGHTLY TO CLOSE THE GAP BETWEEN THE ALUMINUM LINE AND THE FIREWALL COVER. SEAL ANY REMAINING GAP WITH RTV SILICONE.

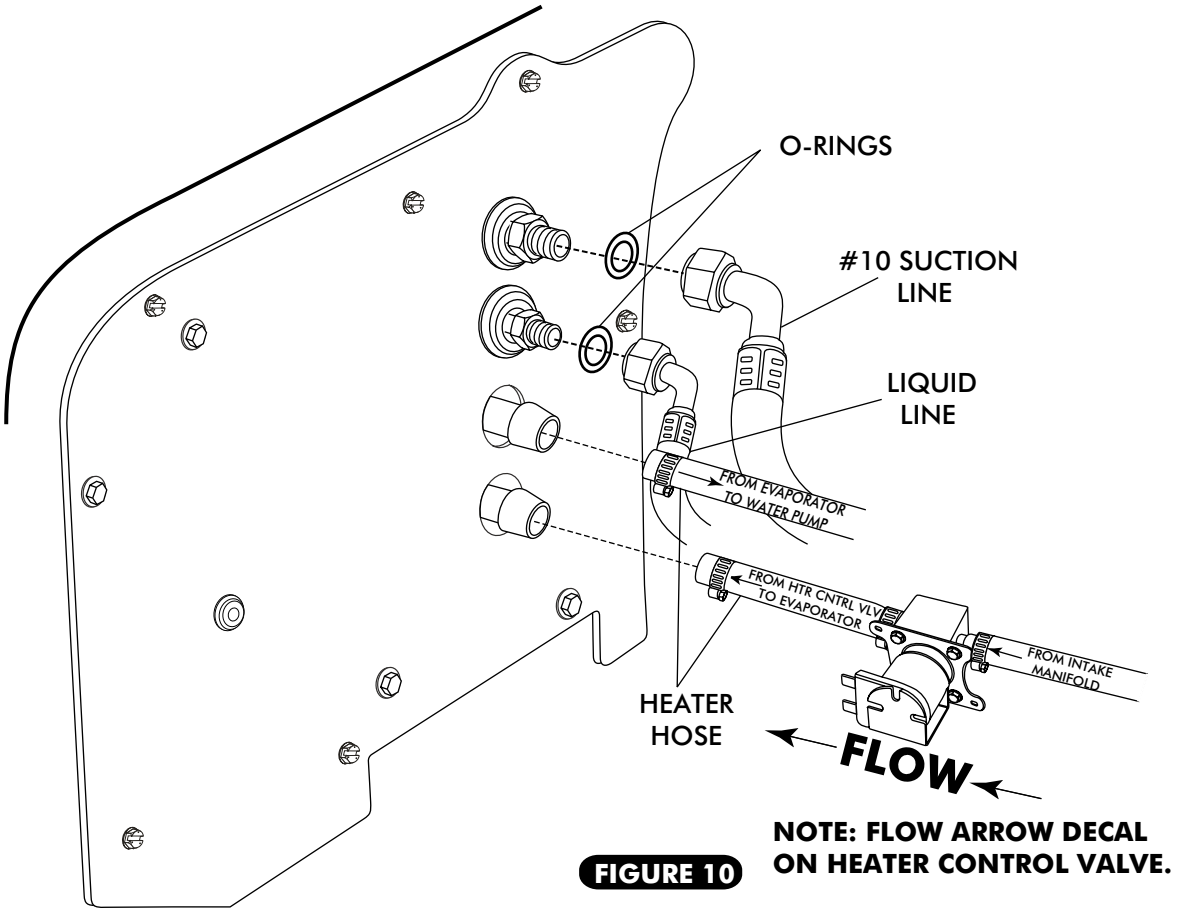


FIGURE 10

NOTE: FLOW ARROW DECAL ON HEATER CONTROL VALVE.

AC & HEATER HOSE ROUTING

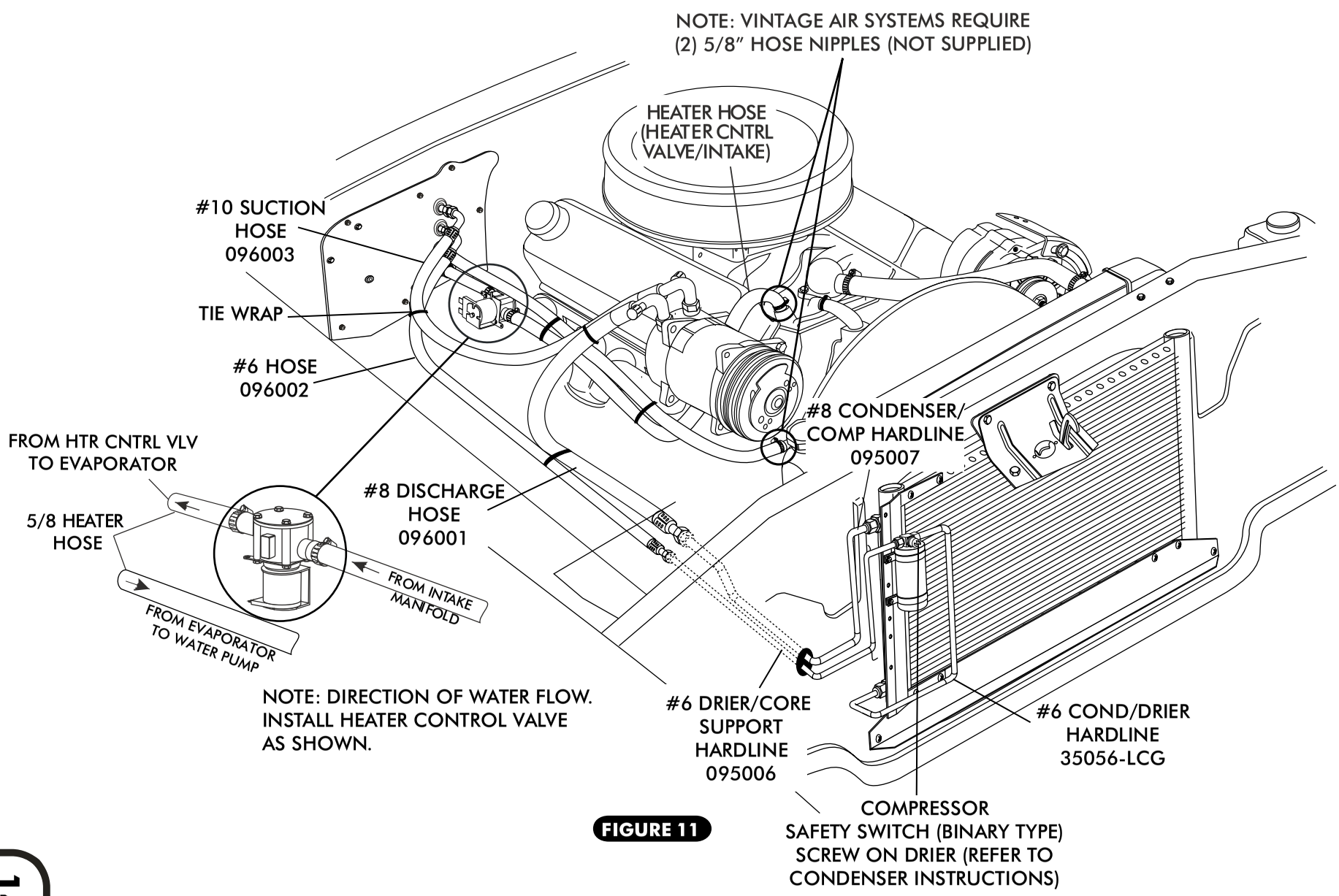


FIGURE 11

FINAL STEPS

- ☐ INSTALL DUCT HOSES AS SHOWN IN FIGURE 13, PAGE 16.
- ☐ ROUTE A/C WIRES THROUGH 3/8" GROMMET AS SHOWN ON FIGURE 12 (12 VOLT/GROUND/BINARY SWITCH/HEATER VALVE).
- ☐ INSTALL CONTROL PANEL ASM.
- ☐ PLUG THE WIRING HARNESS IN THE ECU MODULE ON SUB CASE AS SHOWN IN FIGURE 13, PAGE 16 (WIRE ACCORDING TO WIRING DIAGRAM ON PAGE 17 AND 18.)
- ☐ INSTALL NEW GLOVE BOX USING OEM SCREWS, (SEE FIGURE 12a.)
- ☐ INSTALL GLOVE BOX DOOR
- ☐ REINSTALL ALL PREVIOUSLY REMOVED ITEMS, INNER FENDER.
- ☐ FILL RADIATOR WITH AT LEAST A 50/50 MIXTURE OF APPROVED ANTIFREEZE AND DISTILLED WATER. IT IS THE OWNER'S RESPONSIBILITY TO KEEP THE FREEZE PROTECTION AT THE PROPER LEVEL FOR THE CLIMATE IN WHICH THE VEHICLE IS OPERATED. FAILURE TO FOLLOW ANTIFREEZE RECOMMENDATIONS WILL CAUSE HEATER CORE TO CORRODE PREMATURELY AND POSSIBLY BURST IN AC MODE AND/OR FREEZING WEATHER, VOIDING YOUR WARRANTY.
- ☐ DOUBLE CHECK ALL FITTINGS, BRACKETS AND BELTS FOR TIGHTNESS.
- ☐ VINTAGE AIR RECOMMENDS THAT ALL AC SYSTEMS BE SERVICED BY A CERTIFIED AUTOMOTIVE AIR CONDITIONING TECHNICIAN.
- ☐ EVACUATE THE SYSTEM FOR A MINIMUM OF 45 MINUTES PRIOR TO CHARGING AND LEAK CHECK PRIOR TO SERVICING.
- ☐ CHARGE THE SYSTEM TO THE CAPACITIES STATED ON THE INFORMATION PAGE (PAGE 4) OF THIS INSTRUCTION MANUAL.
- ☐ SEE OPERATION OF CONTROLS PROCEDURES PAGE 19.

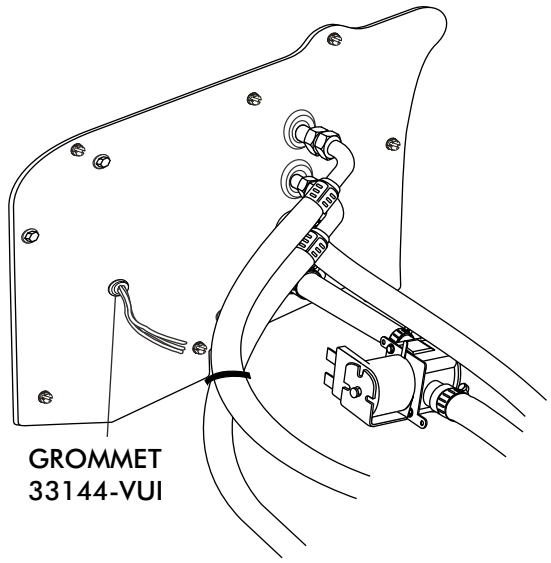


FIGURE 12

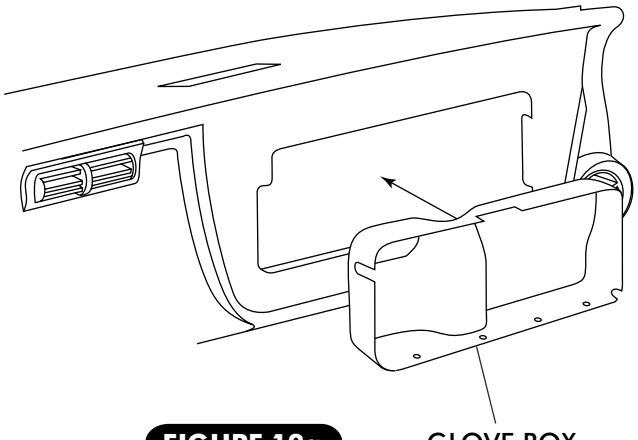


FIGURE 12a

CONTROL PANEL & DUCT HOSE ROUTING

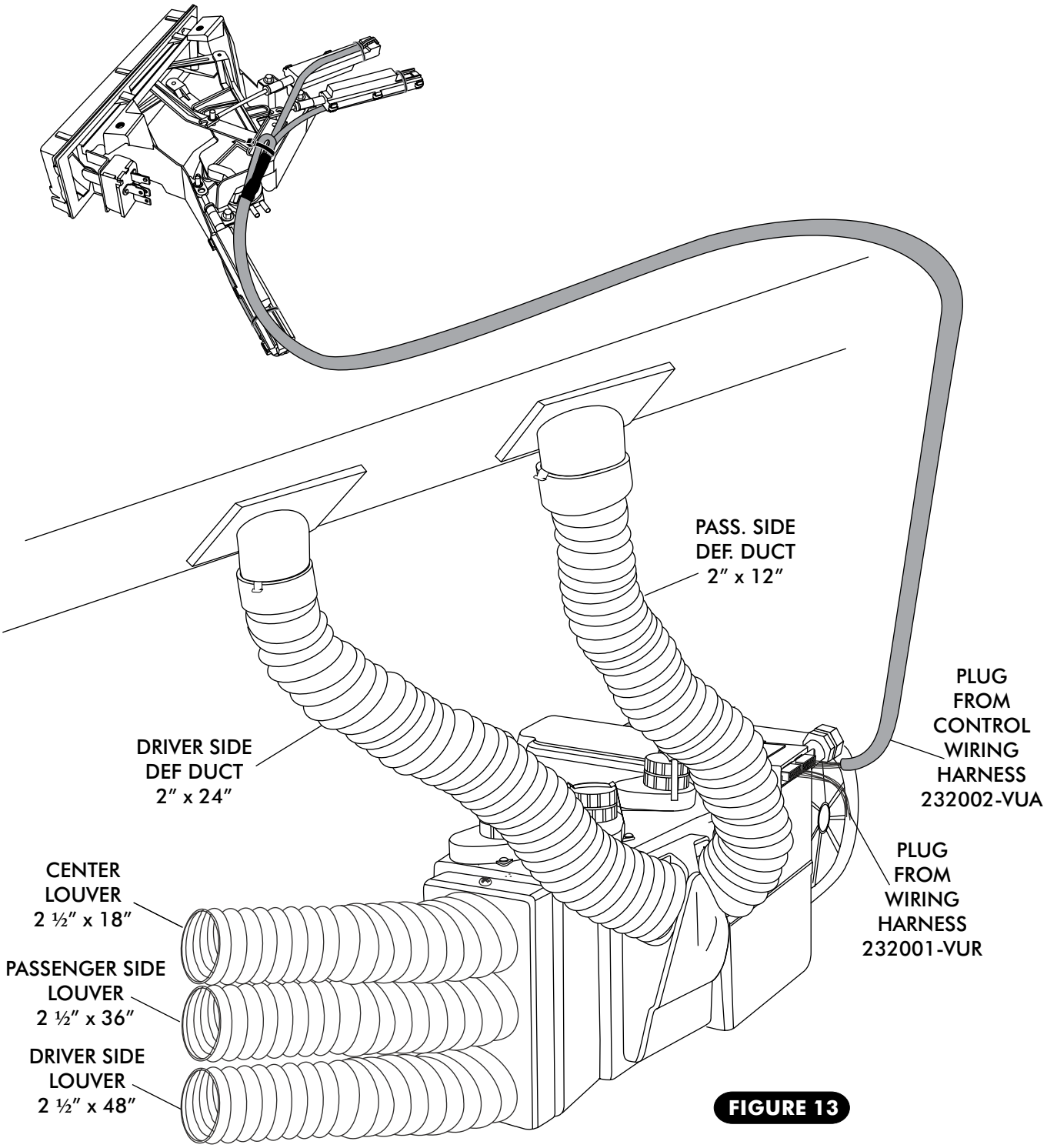
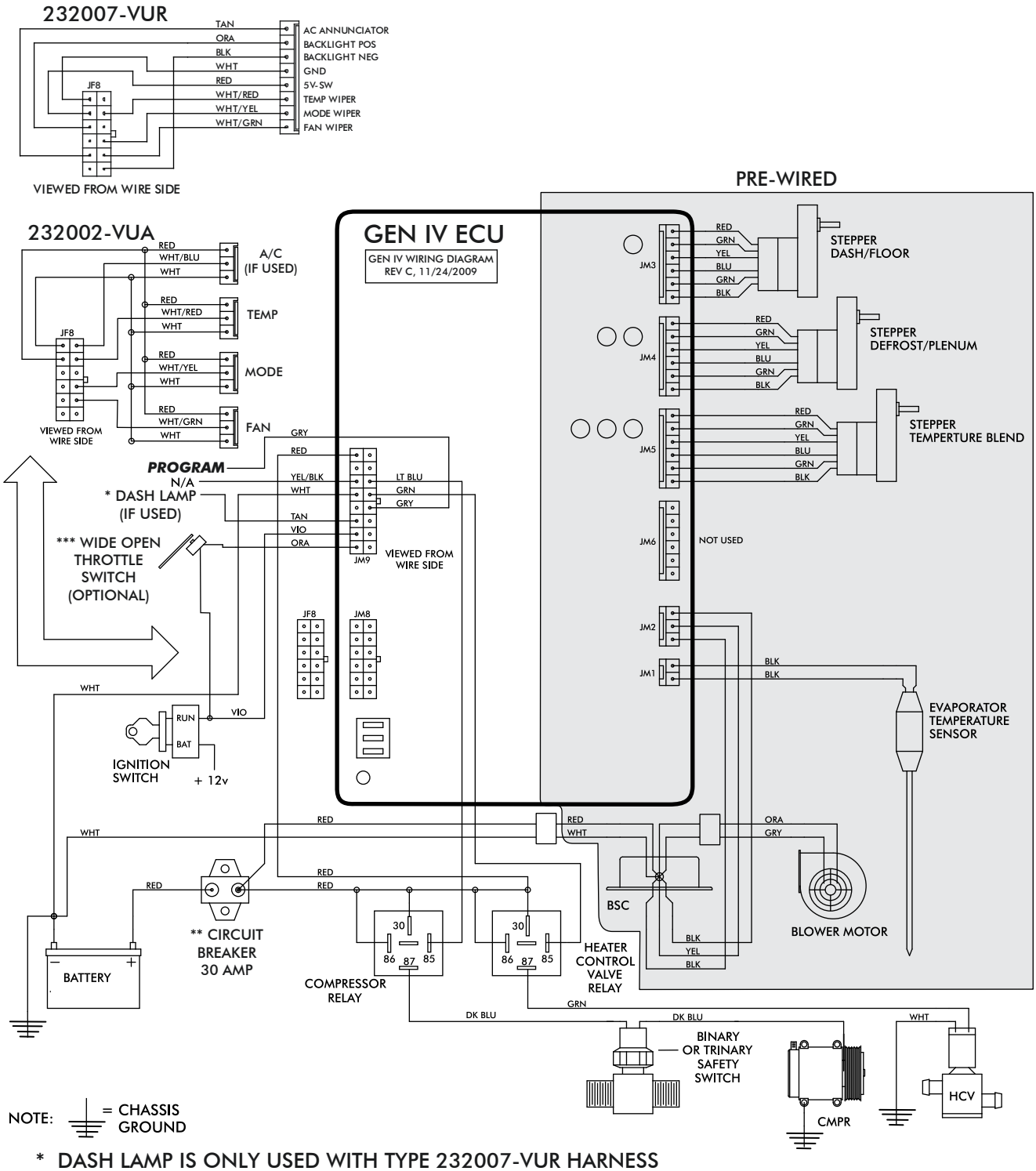


FIGURE 13

WIRING DIAGRAM

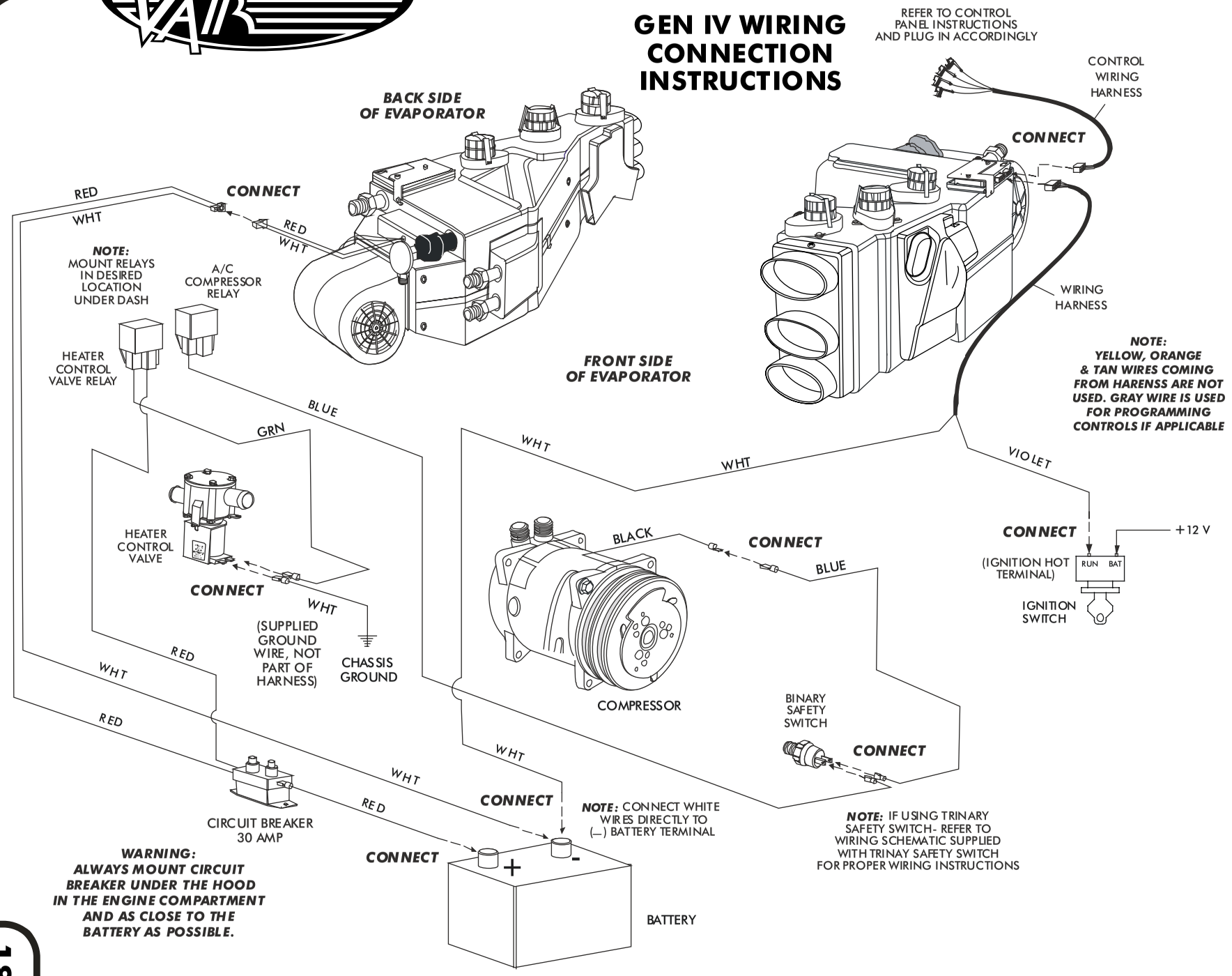


* DASH LAMP IS ONLY USED WITH TYPE 232007-VUR HARNESS

** WARNING: ALWAYS MOUNT CIRCUIT BREAKER UNDER THE HOOD IN THE ENGINE COMPARTMENT AND AS CLOSE TO THE BATTERY AS POSSIBLE.

*** WIDE OPEN THROTTLE SWITCH CONTACTS CLOSE ONLY AT FULL THROTTLE, WHICH DISABLES AC COMPRESSOR.

GEN IV WIRING CONNECTION INSTRUCTIONS



OPERATION OF CONTROLS

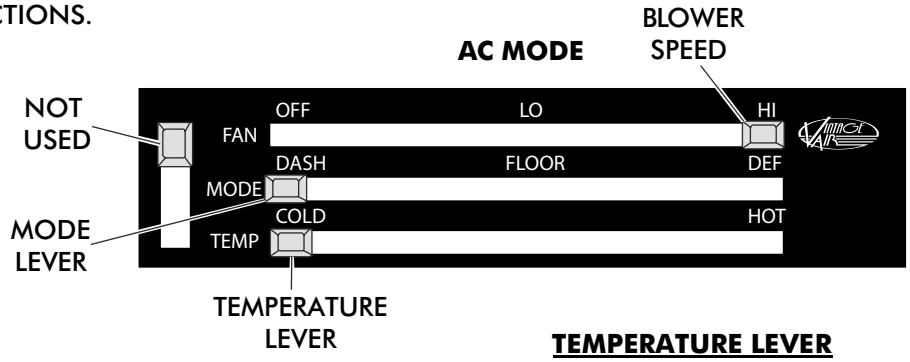
NOTE: CONTROLS **MUST BE** CALIBRATED FOR PROPER OPERATION. SEE CALIBRATION INSTRUCTIONS INCLUDED WITH CONTROLS KIT FOR CALIBRATION PROCEDURE.

THE TEMPERATURE LEVER TOGGLES BETWEEN A/C AND HEAT MODES. FOR A/C MODE SLIDE THE TEMPERATURE LEVER ALL THE WAY LEFT TO ENGAGE THE COMPRESSOR, THEN MOVE THE LEVER TO SELECT THE DESIRED TEMPERATURE. FOR HEAT MODE SLIDE THE LEVER RIGHT TO DISENGAGE THE COMPRESSOR, THEN MOVE THE LEVER TO SELECT DESIRED TEMPERATURE.

NOTE: EACH TIME THE SYSTEM TOGGLES BETWEEN MODES, THE BLOWER WILL MOMENTARILY CHANGE SPEEDS.

ALL SWITCHES ARE VARIABLE BETWEEN POSITIONS, SYSTEM WILL PERFORM A BLEND BETWEEN THE FUNCTIONS.

AC MODE

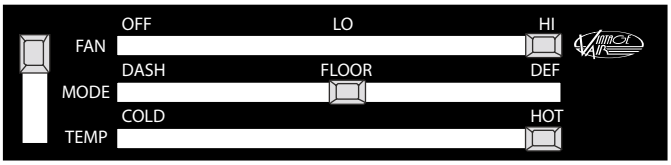


BLOWER SPEED
ADJUST TO DESIRED SPEED

MODE LEVER
SLIDE THE LEVER TO THE LEFT POSITION

TEMPERATURE LEVER
IN A/C MODE SLIDE THE TEMPERATURE LEVER ALL THE WAY TO THE LEFT TO ENGAGE COMPRESSOR. (SLIDE LEVER LEFT OR RIGHT TO ADJUST DESIRED TEMPERATURE)

HEAT MODE



BLOWER SPEED
ADJUST TO DESIRED SPEED

MODE LEVER
SLIDE THE LEVER TO THE CENTER POSITION

TEMPERATURE LEVER
SLIDE THE TEMPERATURE LEVER ALL THE WAY RIGHT TO THE HOT POSITION. (SLIDE LEVER LEFT OR RIGHT TO DESIRED TEMPERATURE)

DEFROST/ DE-FOG MODE

BLOWER SPEED
ADJUST TO DESIRED SPEED

MODE LEVER
SLIDE THE LEVER TO THE RIGHT POSITION

TEMPERATURE LEVER
ADJUST LEVER TO DESIRED TEMPERATURE. (COMPRESSOR IS AUTOMATICALLY ENGAGED)

TROUBLE SHOOTING INFORMATION

SYMPTOM	*CONDITION*	*CHECKS*	*ACTIONS*	*NOTES*
1. BLOWER STAYS ON HIGH SPEED WHEN IGNITION IS ON	NO OTHER FUNCTIONS WORK	CHECK FOR DAMAGED PINS OR WIRES IN CONTROL HEAD PLUG.	VERIFY ALL PINS ARE INSERTED INTO PLUG. INSURE NO PINS ARE BENT OR DAMAGES IN ECU.	
		CHECK FOR DAMAGED GROUND WIRE (WHITE) IN CONTROL HEAD HARNESS.	VERIFY CONTINUITY TO CHASSIS GROUND WITH WHITE CONTROL HEAD WIRE AT VARIOUS POINTS	LOSS OF GROUND ON THIS WIRE RENDER CONTROL HEAD IN OPERABLE
	ALL OTHER FUNCTIONS WORK	CHECK FOR DAMAGED BLOWER SWITCH OR POT AND ASSOCIATED WIRING.		SEE BLOWER SWITCH CHECK PROCEDURE
BLOWER STAYS ON HIGH SPEED WHEN IGNITION IS ON OR OFF		UNPLUG 3 WIRE BSC CONTROL CONNECTOR FROM ECU. IF BLOWER SHUTS OFF, ECU IS EITHER IMPROPERLY WIRED, OR DAMAGED.	BE SURE SMALL, 20 GA WHITE GROUND WIRE IS CONNECTED TO THE BATTERY GROUND POST. IF IT IS, REPLACE ECU.	
		UNPLUG 3 WIRE BSC CONTROL CONNECTOR FROM ECU. IF BLOWER STAYS RUNNING, THE BSC IS EITHER IMPROPERLY WIRED, OR DAMAGED.	CHECK TO INSURE THAT NO BSC WIRING IS DAMAGED OR SHORTED TO VEHICLE GROUND. THE BSC OPERATES THE BLOWER BY GROUND SIDE PWM SWITCHING. THE POSITIVE WIRE TO THE BLOWER WILL ALWAYS BE HOT. IF THE "GROUND" SIDE OF THE BLOWER IS SHORTED TO CHASSIS GROUND, THE BLOWER WILL RUN ON HI.	
			REPLACE BSC. (THIS WILL REQUIRE EVAPORATOR TO BE REMOVED FROM VEHICLE.)	NO OTHER PART REPLACEMENTS SHOULD BE NECESSARY

2. COMPRESSOR WILL NOT TURN ON (ALL OTHER FUNCTIONS WORK)	SYSTEM IS NOT CHARGED	SYSTEM MUST BE CHARGED FOR COMP. TO ENGAGE	CHARGE SYSTEM OR BYPASS PRESSURE SWITCH.	***DANGER- NEVER BYPASS SAFETY SWITCH WITH ENGINE RUNNING, SERIOUS INJURY CAN RESULT.***
		CHECK FOR FAULTY A/C POT OR ASSOC. WIRING (NOT APPLICABLE TO 3 POT CONTROLS	CHECK CONTINUITY TO GROUND ON WHITE CONTROL HEAD WIRE. CHECK FOR 5V ON RED CONTROL HEAD WIRE.	TO CHECK FOR PROPER POT FUNCTION, CHECK VOLTAGE AT WHITE/ BLUE WIRE. VOLTAGE SHOULD BE BETWEEN 0 AND 5V, AND WILL VARY WITH POT LEVER POSTION.
		CHECK FOR DISCONNECTED OR FAULTY THERMISTOR.	CHECK TWO PIN CONNECTOR AT ECU HOUSING	DISCONNECTED OR FAULTY THERMISTOR WILL CAUSE COMPRESSOR TO BE DISABLED.

3. COMPRESSOR WILL NOT TURN OFF (ALL OTHER FUNCTIONS WORK)		CHECK FOR FAULTY A/C POT OR ASSOC. WIRING	REPAIR/REPLACE POT/ CONTROL WIRING	RED WIRE @ A/C POT SHOULD HAVE APPROX. 5V WITH IGNITION ON. WHITE WIRE WILL HAVE CONTINUITY TO CHASSIS GROUND, WHITE/ BLUE WIRE SHOULD VARY BETWEEN 0V AND 5V WHEN LEVER IS MOVED UP AND DOWN.
		CHECK FOR FAULTY A/C RELAY	REPLACE RELAY	

TROUBLE SHOOTING INFORMATION CONT.

4. SYSTEM WILL NOT TURN ON OR RUNS INTERMITTENLY	WORKS WHN ENGINE IS NOT RUNNING, SHUTS OFF WHEN ENGINE IS STARTED. (TYPICALLY EARLY GEN 4, BUT POSSIBLE ON ALL VERSIONS)	NOISE INTERFERENCE FROM EITHER IGNITION OR ALTERNATOR	INSTALL CAPACITORS ON IGN. COIL, AND ALTERNATOR. ENSURE GOOD GROUND AT ALL POINTS. RELOCATE COIL AND ASSOCIATED WIRING AWAY FROM ECU AND ECU WIRING. CHECK FOR BURNED OR LOOSE PLUG WIRES.	IGNITION NOISE (RADIATED OR CONDUCTED) WILL CAUSE THE SYSTEM TO SHUT DOWN DUE TO HIGH VOLTAGE SPIKES. IF THIS IS SUSPECTED, CHECK WITH A QUALITY OSCILISCOPE. SPIKES GREATER THAN 16V WILL SHUT DOWN ECU. INSTALL A RADIO CAPACITOR AT THE POSITIVE POST OF THE IGNITION COIL (SEE RADIO CAPACITOR INSTALLATION BULLETEN). A FAULTY ALTERNATOR OR WORN OUT BATTERY CAN ALSO RESULT IN THIS CONDITION FOR ALTERNATOR REGULATOR TO FUNCTION PROPERLY.
	WILL NOT TURN ON UNDER ANY CONDITIONS	VERIFY CONNECTIONS ON POWER LEAD, IGNITION LEAD, AND BOTH WHITE GROUND WIRES	CHECK FOR POSITIVE POWER AT HEATER VALVE GREEN WIRE. AND BLOWER RED WIRE. CHECK FOR GROUND ON CONTROL HEAD WHITE WIRE	
		VERIFY BATTERY VOLTAGE IS GREATER THAN 10 VOLTS AND LESS THAN 16.	VERIFY PROPER METER FUNCTION BY CHECKING A KNOWN GOOD BATTERYS VOLTAGE.	

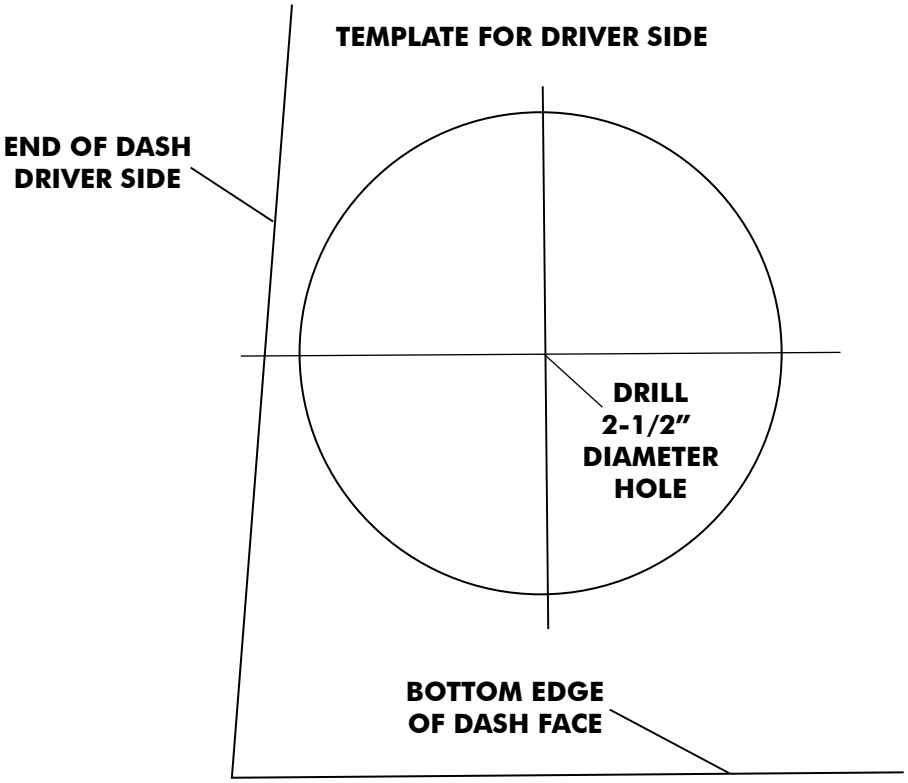
5. LOSS OF MODE DOOR FUNCTION	NO MODE CHANGE AT ALL	CHECK FOR DAMAGED MODE SWITCH OR POT AND ASSOCIATED WIRING		
	PARTIAL FUNCTION OF MODE DOORS	CHECK FOR OBSTRUCTED OR BINDING MODE DOORS		TYPICALLY CAUSED BY EVAPORATOR HOUSING INSTALLED IN A BLIND IN THE VEHICLE. BE SURE ALL MOUNTING LOCATIONS LINE UP AND DON'T HAVE TO BE FORCED INTO POSITION.
		CHECK FOR DAMAGED STEPPER MOTOR OR WIRING		

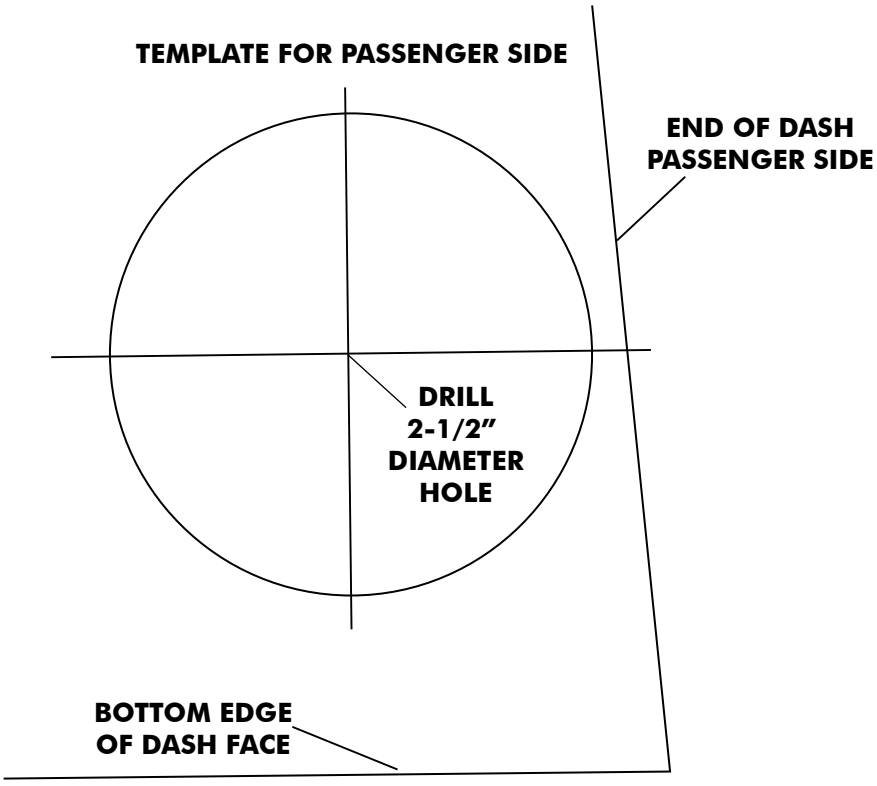
6. BLOWER TURNS ON AND OFF RAPIDLY	BATTERY VOLTAGE IS AT LEAST 12V.	CHECK FOR AT LEAST 12V BETWEEN GREEN HEATER VALVE WIRE AND CHASSIS GROUND.	INSURE ALL SYSTEM GROUNDS AND POWER CONNECTION ARE CLEAN AND TIGHT.	
	BATTERY VOLTAGES IS LESS THAN 12V	CHECK FOR FAULTY BATTERY OR ALTERNATOR	CHARGE BATTERY	SYSTEM SHUTS OFF BLOWER AT 10V. POOR CONNECTIONS OR WEAK BATTERY CAN CAUSE SHUT DOWN AT UP TO 11V

7. ERATIC FUNCTIONS OF BLOWER, MODE , TEMP, ETC.		CHECK FOR DAMAGED SWITCH OR POT AND ASSOCIATED WIRING	REPAIR OR REPLACE	

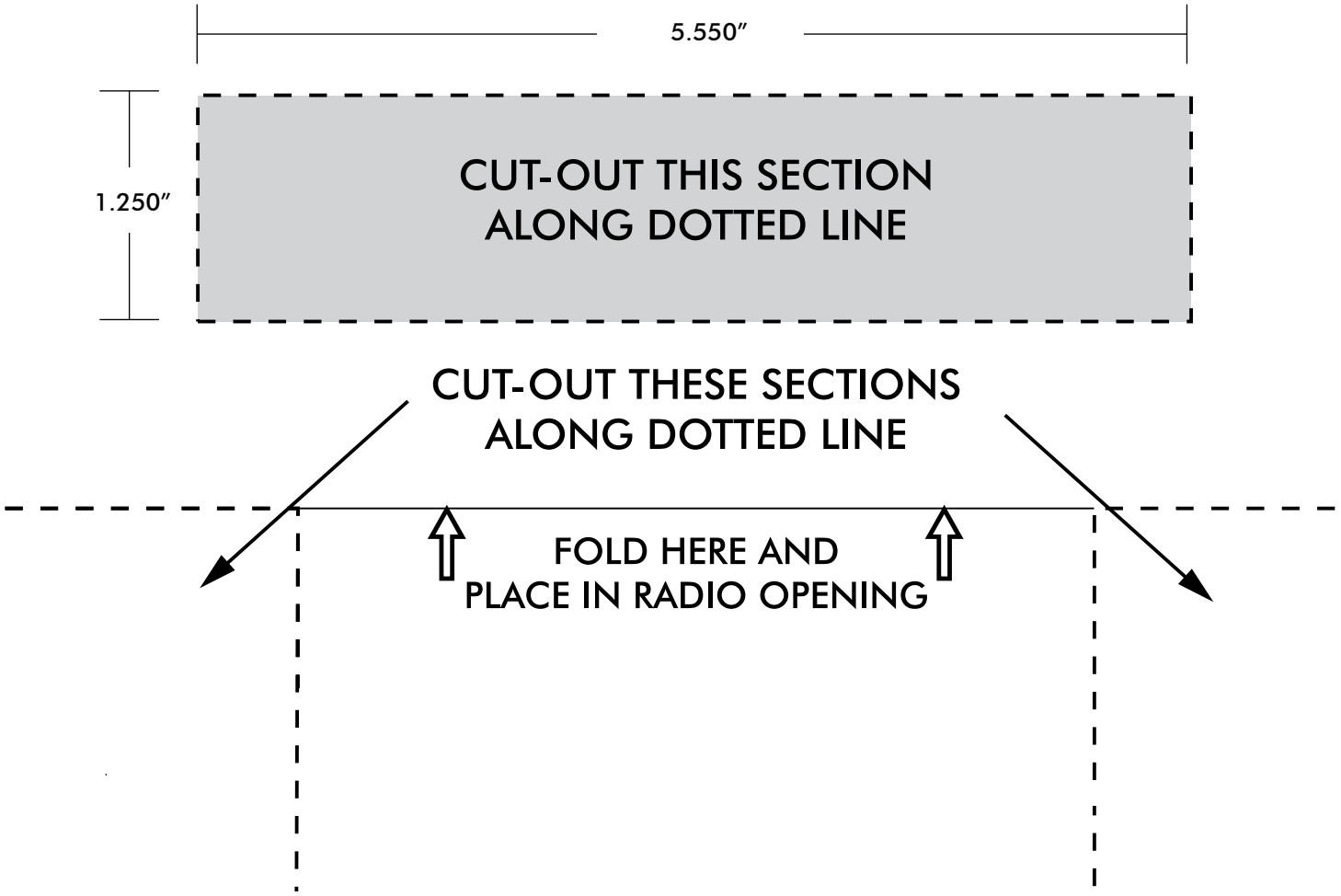
8. WHEN THE IGNITION IS TURNED ON, THE BLOWER MOMENTARILY COMES ON, THEN SHUTS OFF. THIS IS WITH THE BLOWER SWITCH IN THE OFF POSITION		THIS IS AN INDICATOR THAT THE SYSTEM HAS BEEN RESET. BE SURE THE RED POWER WIRE IS ON THE BATTERY POST AND NOT ON A SWITCHED SOURCE. ALSO, IF THE SYSTEM IS PULLED BELOW 7V EVEN FOR A SPLIT SECOND, THE SYSTEM WILL RESET.	RUN RED POWER WIRE DIRECTLY TO BATTERY	

DRIVER/ PASSENGER SIDE LOUVER TEMPLATE





CENTER LOUVER TEMPLATE



EVAPORATOR KIT PACKING LIST

EVAPORATOR KIT
751171

NO.	QTY.	PART NO.	DESCRIPTION	
1.	1	744005	GEN IV 3 VENT EVAP. SUB CASE w/204 ECU	_____
2.	1	791171	ACCESSORY KIT 67-72 CHEV P-UP wo AC w/ FACTORY AIR CONTROLS	_____

CHECK BY: _____
PACKED BY: _____
DATE: _____

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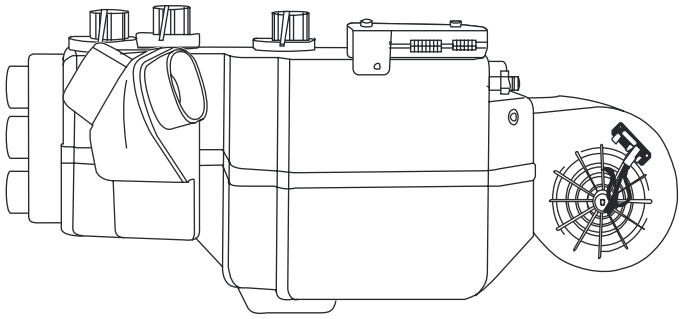

GEN IV 3 VENT EVAP SUB CASE w/204 ECU 744005

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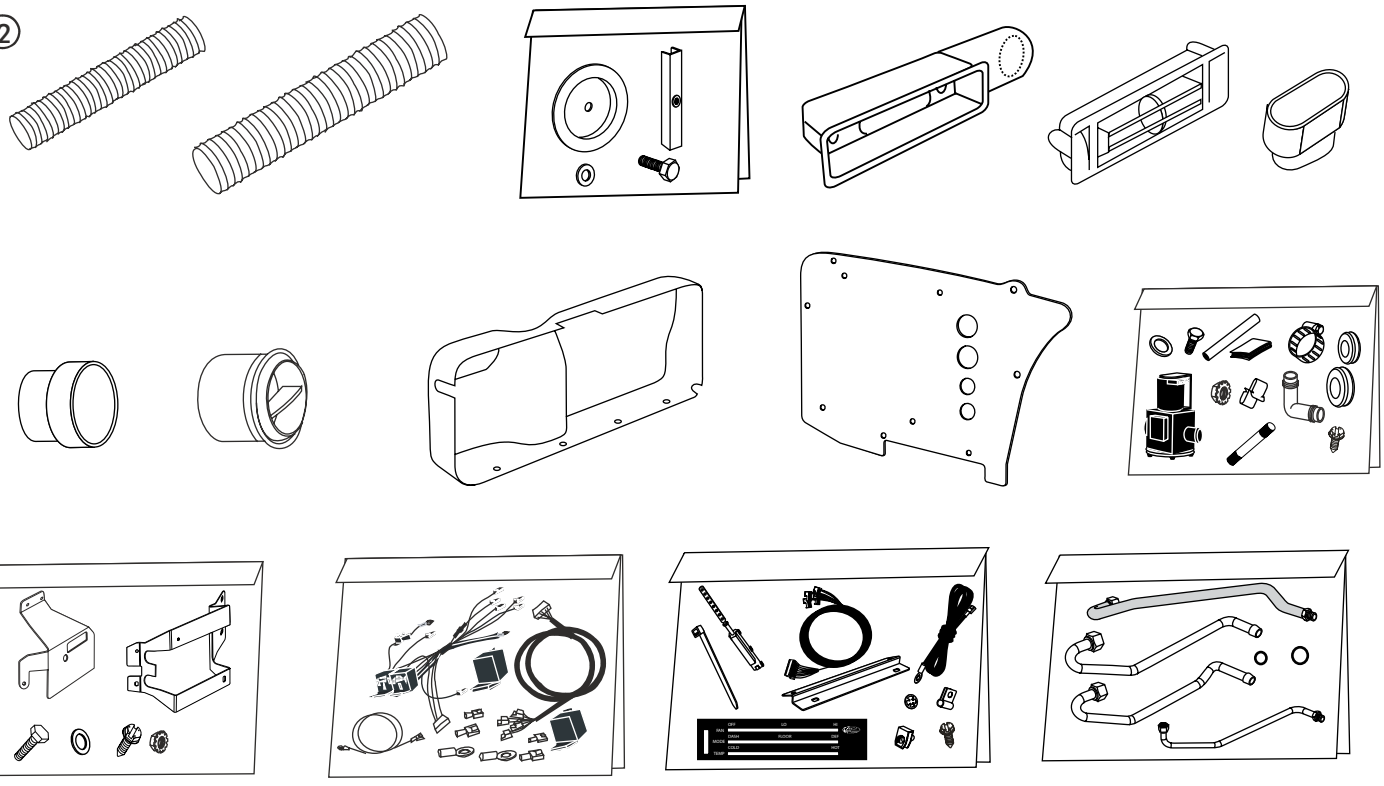

ACCESSORY KIT 791171

NOTE: IMAGES MAY NOT DEPICT ACTUAL PARTS AND QUANTITIES. REFER TO PACKING LIST FOR ACTUAL PARTS AND QUANTITIES.